RECORDS OF MICROLEPIDOPTERA FROM SOMERSET, SEPTEMBER, 1984

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Somerset is predominantly a pastural county and has largely escaped the destruction of habitat that follows the prairie-farming methods of the arable east. Consequently its flora and fauna are rich. Nevertheless, very little recording of the Microlepidoptera has taken place in the present century. In an otherwise useful list, Turner (1955) described many common species as rare or even extinct in the county because they had not been noted since the publication of *The Victoria County History* (Hudd, 1906). He did not incorporate unpublished records sent to him by Pelham-Clinton or those in a brief list of species new to the county (Pelham-Clinton, 1949). Since the publication of Turner's list, two papers by Emmet (1967; 1973) added 24 microlepidoptera to the county list, gave several new vice-county records and mentioned new localities for many supposedly rare or vanished species. I am not aware of any other list.

In view of this neglect, a party of microlepidopterists comprising E. C. Pelham-Clinton, Dr. J. D. Bradley, Dr. J. R. Langmaid, my wife and myself spent a week in the county from the 8th to the 15th of September, 1984. From our base at Lympsham near Westonsuper-Mare, we visited a number of localities in VC5 and VC6; these are listed below. We are grateful to the Nature Conservancy Council and the Somerset Naturalists' Trust for permission to record and collect on some of their reserves, notably Ebbor Gorge and Shapwick Heath.

We recorded in all 197 species of Microlepidoptera of which 33 do not appear at all in the lists mentioned above, and 63 seem to have no prior written record from either VC5 or VC6. Included are some exceedingly common species which have almost certainly been previously taken in Somerset, though perhaps not placed on record. This paper mentions only these "new" species and those which were described by Turner as rare or extinct in Somerset. "New" county records are indicated by two asterisks and "new" vice-county records by a single asterisk. The nomenclature is that of Bradley & Fletcher (1979) with the Addenda & Corrigenda by the same authors incorporated by Hall-Smith (1983).

The localities from which records were made are listed in alphabetical order by vice-counties. Each name is followed by an abbreviation for use in the list, the date of our visit and remarks.

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Bishops Lydeard (BL). 15.ix. A hedgerow where *Teleiodes scriptella* (Hübner) had previously been taken by ECP-C.

Bridgewater Bay Nature Reserve, Otterhampton (BBNR). 12.ix. This includes an area of salt-marsh. We are grateful to the warden for advice on the best ground for recording.

Cothlestone Hill, Park End, Quantocks (CH). 15.ix. Visited by ECP-C and JDB only, en route to Bishops Lydeard.

Holford (H). 12.ix. A rich area of mixed woodland.

Langford Heathfield Nature Reserve, Langford Budville (LHNR). 15.ix. We spent only half an hour on this fine reserve and did no collecting because we had not applied for a permit.

Rexton Gorse, Crowcombe (RG). 15.ix. The woodland is coniferised but there is a fringing belt of deciduous trees.

VC6

Brean Down (BD). 14.ix. Limestone with scrub vegetation.

Cheddar district (CD). 9.ix. Roadside recording along a lane at ST442547 and beside the Cheddar-Shipham road at ST451555.

Ebbor Gorge Nature Reserve (EGNR). 10.ix. Mixed woodland with some open downland. We were most grateful to the warden, Mr. Tom Hodgson, for conducting our party.

Kewstoke (K). 14.ix. We visited the ridge of downland called Middle Hope which forms the northern arm of Sand Bay, and a patch of salt-marsh south of Swallow Cliff.

Loxley Wood, Moorlinch, Polden Hills (LW). 9.ix. Mixed woodland.

Lympsham (L). 8-15.ix. Our base. We ran MV traps every night and examined the local hedgerows.

Shapwick Heath Nature Reserve (SHNR). 11 and 13.ix. On the first visit we approached the reserve from the west where the vegetation is mostly mixed woodland and carr. On the second occasion, after advice from the warden, we approached from the east, where the ground is more open with heather, bog-myrtle, gorse and dwarf sallow.

Weston-super-Mare (WsM). 8 and 14.ix. A few records were made on the outskirts in transit to other localities.

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LIST OF SELECTED SPECIES

NEPTICULIDAE

- **Trifurcula cryptella (Stainton) *VC6 SHNR. Vacated mines on Lotus uliginosus.
- Stigmella fragariella (Heyden) VC5 BBNR; LHNR. *VC6 BD; CD. Vacated and a few tenanted mines on Agrimonia.
- **S. dulcella (Heinemann) *VC6 CD. Vacated mines on Fragaria.
- **S. splendidissimella (Herrich-Schäffer) *VC6 CD. A few tenanted and vacated mines on Rubus caesius.
- **S. ulmariae (Wocke) *VC6 SHNR. Tenanted and vacated mines common on *Filipendula ulmaria* beside the track leading to the reserve from the east.
- **S. serella (Stainton) *VC5 LHNR. *VC6 SHNR. Tenanted (Shapwick only) and vacated mines on *Potentilla erecta*.
- S. continuella (Stainton) *VC5 RG. VC6 SHNR. Tenanted and vacated mines on *Betula*.
- **S. speciosa (Frey) *VC5 H. *VC6 CD; WsM. A few tenanted and many vacated mines on Acer pseudoplatanus.
- **S. pomella (Vaughan) *VC6 CD. Vacated mines on Malus.
- S. paradoxa (Frey) *VC CH. Vacated mines on Crataegus,
- **S. atricapitella (Haworth) *VC5 H; LHNR; RG. *VC6 EGNR; SHNR. Many vacated and a few tenanted mines on Quercus.
- S. ruficapitella (Haworth) *VC H; LHNR; R. VC6 RGNR; LW; SHNR. Many vacated mines on Quercus.
- S. suberivora (Stainton) *VC6 WsM. A vacated mine on Quercus ilex.
- S. tiliae (Frey) VC6 CD. Many tenanted and vacated mines on Tilia cordata.
- **S. malella (Stainton) *VC6 CD. a few vacated mines on Malus.
- **S. catharticella (Stainton) *VC6 EGNR. A few vacated mines on Rhamnus,
- S. nylandriella (Tengström) (aucupariae (Frey)) VC5 H; RG. Many vacated and a few tenanted mines on Sorbus aucuparia.
- S. magdalenae (Klimesch) (nylandriella auctt.) VC5 RG. A few vacated mines on Sorbus aucuparia.
- S. betulicola (Stainton) *VC5 H; RG. VC6 SHNR. Many tenanted and vacated mines on Betula.
- S. distinguenda (Heinemann) VC5 H. VC6 SHNR. A few tenanted and many vacated mines on *Betula*. I recorded this species from Shapwick in 1967 but withdrew the record in 1973 as it was supported by neither mine nor specimen in my collection. It is in fact the most common nepticulid on *Betula* in both localities.
- S. glutinosae (Stainton) *VC6 SHNR. Several tenanted and vacated mines on Alnus.

TISCHERIIDAE

Tischeria dodonaea Stainton *VC5 H. A single mine on Quercus containing a dead larva.

HELIOZELIDAE

Heliozela hammoniella Sorhagen (betulae Stainton) *VC5 RG. VC6 SHNR. Many vacated mines on Betula.

LYONETHDAE

- Bucculatrix maritima Stainton *VC5 BBNR. VC6 BD, on adjacent salt-marsh; K. Many vacated mines on Aster tripolium.
- **B. frangulella (Goeze) *VC6 EGNR; SHNR. Mines and larvae on Frangula alnus, abundant at the second locality.
- **B. cidarella Zeller *VC6 SHNR. Vacated mines locally common on Alnus. There was no trace of this species on Myrica.
- B. thoracella (Thunb.) VC6 CD. Mines, moulting cocoons and feeding places abundant on Tilia cordata.
- B. crataegi Zeller *VC6 K. Two vacated mines and a moulting cocoon on Crataegus.
- B. demaryella (Duponchel) *VC5 RG. VC6 SHNR. A few vacated mines and moulting cocoons on Betula.

GRACILLARIIDAE

- Caloptilia betulicola (Hering) *VC5 H; RG. VC6 SHNR. Several vacated mines and rolled leaves on Betula.
- **Calvbites phasianipennella (Hübner) *VC6 SHNR. An adult and several tenanted mines and cones on Polygonum; adults reared.
- Parornix finitimella (Zeller) *VC6 EGNR; K; SHNR. A few tenanted mines and folds on Prunus spinosa. Old feeding of the first generation was very common.
- Phyllonorycter sorbi (Frey) *VC5 H. Many tenanted mines on Sorbus aucuparia.
- **P. viminiella (Sircom) *VC6 SHNR. A vacated mine on Salix viminalis determined from the pupal exuviae by Dr. M. R. Wilson.
- **P. cavella (Zeller) *VC6 SHNR. A few tenanted mines on Betula.
- P. quinqueguttella (Stainton) VC5 LHNR. *VC6 SHNE. Tenanted mines on Salix repens.
- P. lautella (Zeller) VC6 EGNR; SHNR. Several vacated mines on Quercus; also identified from pupal exuviae. "Very rare" (Turner, op. cit.).

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- *P. schreberella* (Fabricius) VC5 BL; H. VC6 EGNR; LW. Tenanted and vacated mines common on *Ulmus*. Though described by Turner as "Very rare", we found it to be as plentiful as *P. tristrigella* (Haworth).
- *P. ulmifoliella* (Hübner) VC5 H; RG. VC6 SHNR. Mines very common on *Betula*. "Reported as common in birch woods many years ago" (Turner, *op. cit.*).
- P. stettinensis (Nicelli) *VC6 SHNR. A few tenanted mines on Alnus.
- **P. froelichiella (Zeller) *VC6 SHNR. A few tenanted mines on Alnus.
- P. geniculella (Ragonot) VC5 H. VC6 CD; LW; WsM. Tenanted and vacated mines common on Acer pseudoplatanus; first recorded by Emmet (1973).

YPONOMEUTIDAE

- **Ocnerostoma friesei Svensson *VC6 SHNR. Several tenanted mines on Pinus sylvestris. The larvae in the only two that were collected fed up rapidly and left their mines to spin cocoons after a few days; an adult emerged on 13.xi.1984. O. friesei regularly has a third generation in the autumn on the Continent, but this has not hitherto been recorded in Britain (D. J. L. Agassiz, pers. comm.). Two similar mines collected in VC5 at RG were probably the same species but the larvae they contained proved to be dead.
- Roeslerstammia erxlebella (Fabricius) VC6 CD. Several mines and larvae on *Tilia cordata*. Turner gives no more recent record than that of Hudd (1906).
- **COLEOPHORIDAE**
- The "nigricella" group. "Coleophora nigricella (Steph.) Probably still occurs in some of the old orchards. There are only very old records, however" (Turner, op. cit.). The "nigricella" of Stephens is now known to consist of three species, two of which we recorded; one feeds sometimes on Malus, but it is a secondary foodplant.
- **Coleophora cerasivorella Packard. Widespread and common on Crataegus. At the date of our visit most of the larvae were still in the mines from which they excise their first case. After doing so they feed little, usually making only one or two small blotches close to the mine before fixing to a twig for winter. Consequently they are rarely seen, although the pattern of early feeding is conspicuous and characteristic. Cases of this species were not retained as we did not regard the records as controversial. Among the localities where larvae were found were *VC5 BBNR. *VC6 BD; K; SHNR.

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**C. prunifoliae Doets First instar mines and small cases of the group were locally common on Prunus spinosa and samples were collected at *VC6 K and L. The cases were all excised by mid-September. The larvae then fed extensively for about a week after which they attached themselves to a twig for ecdysis. This accomplished, they moved again leaving the discarded headcapsule in the cup of silk where the case had been fixed. As far as could be observed, they did not resume feeding but after several days of wandering selected another position on a twig for overwintering. Although they had fed for much longer and reached a later instar than C. cerasivorella in autumn, they seemed to have fed for less long than larvae of C. prunifoliae collected in previous years in Essex. Possibly there is some flexibility depending on the season and condition of the foodplant.

Six cases from Kewstoke and six from Lympsham were sleeved out for the winter; three of the former disappeared but the remaining nine produced adults between the 5th and 9th July, 1985. Dissection from each locality showed them to be *C. prunifoliae*. There was no opportunity to search for cases of this group in VC5. The autumnal behaviour of the third member, *C. coracipennella* (Hubner), is still unknown (cf. Emmet, 1984).

- **C. milvipennis Zeller *VC RG. *VC6 SHNR. Larval cases on Betula. They were abundant in the western part of Shapwick Heath but rare elsewhere.
- C. limosipennella (Duponchel) VC6 LW, several larval cases on Ulmus ("Very scarce", Turner, op. cit.).
- C. viminetella Zeller VC6 SHNR, larval cases on Salix and Myrica ("Apparently rare", Turner, op. cit.).
- C. binderella (Kollar) VC6 SHNR. a larval case on Alnus.
- **C. potentillae Elisha *VC6 SHNR, many larval cases on Filipendula spiraea along the eastern approach to the reserve.
- **C. lineolea (Haworth) *VC6 SHNR, larval cases locally common on Stachys sylvatica. Turner's entry under this name refers to C. striatipennella Tengström.
- C. albidella Herrich-Schäffer VC6 SHNR, an old larval case on a leaf of Salix vininalis ("Appears to be very scarce", Turner, op. cit.).
- **C. anatipennella (Hübner) *VC6 K; L; Larval cases fairly common on Prunus spinosa. Turner placed this species in square brackets, writing "The records are doubtless erroneous, and probably refer to C. albidella".
- **C. ardeaepennella Scott *VC6 SHNR, an old larval case on a leaf of Quercus.
- C. ibipennella Zeller VC6 SHNR, an old larval case on Betula.

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- C. troglodytella (Duponchel) VC5 BBNR. VC6 BD. Many larval cases on *Pulicaria* in each locality.
- **C. peribenanderi (Toll) *VC5 BBNR. *VC6 BD; SHNR. Many larval cases on Cirsium.
- **C. argentula (Stephens) *VC5 BBNR; LHNR. *VC6 BD; K; SHNR. Very many larval cases on heads of Achillea millefolium; at Langford Heathfield Nature Reserve they were also found on A. ptarmica, possibly a hitherto unrecorded foodplant.
- **C. atriplicis Meyrick *VC5 BBNR, very many larval cases on Atriplex sp. and Suaeda.

ELACHISTIDAE

Elachista gangabella Zeller VC6 CD; EGNR. Larval mines on Brachypodium.

E. subalbidella Schläger VC6 SHNR, a vacated mine on Molinia.

OECOPHORIDAE

Hofmanophila pseudospretella (Stainton) *VC6 L, adult at MV.

GELECHIIDAE

- **Chrysoesthia sexguttella (Thunberg) *VC5 BBNR. *VC6 SHNR. Larvae mining leaves of Atriplex.
- Teleiodes scriptella (Hübner) VC5 BL, larvae locally common in folded leaves of Acer campestre.
- **Scrobipalpa nitentella (Fuchs) *VC5 BBNR. *VC6 K. Larvae in spinnings among leaves and fruits of Atriplex sp.
- S. costella (Humphreys & Westwood) VC5 BBNR. VC6 L; SHNR. Adults and larval feeding on Solanum. ("Very rare and local", Turner, op. cit.).
- S. acuminatella (Sircom) *VC5 LHNR. VC6 L. Larvae mining leaves of Cirsium.
- Aproaerema anthyllidella (Hübner) VC6 L, several adults at MV light ("Local and uncommon", Turner, op. cit).

MOMPHIDAE

- **Mompha langiella (Hübner) *VC6 EGNR, larvae mining leaves of Circaea lutetiana.
- *M. terminella* (Humphreys & Westwood) VC6 EGNR, larvae mining leaves of *Circaea lutetiana* ("May be no longer resident", Turner, *op. cit.*).

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M. raschkiella (Zeller *VC5 H. VC6 EGNR; SHNR. Tenanted and vacated mines on Epilobium angustifolium ("Very scarce", Turner, op. cit.).

TORTRICIDAE

- ***Phalonidia affinitana* (Douglas) *VC5 BBNR, many larvae in heads of *Aster tripolium*.
- Clepsis spectrana (Treitschke) VC6 L, an adult ("Rather scarce and local", Turner, op. cit.).
- Acleris notana (Donovan) VC5 H. VC6 SHNR. Larvae on Betula ("Rather uncommon", Turner, op. cit.).
- Endothenia gentianaeana (Hübner) VC5 BBNR, larvae in seedheads of Dipsacus ("Very local", Turner, op. cit.).
- **Eucosma tripoliana (Barrett) *VC5 BBNR, larvae in seedheads of Aster tripolium.
- Cydia janthinana (Duponchel) *VC5 BBNR. VC6 BD; EGNR; K. Larvae common in fruits of Crataegus ("Very scarce and local", Turner, op. cit.).

**C. tenebrosana (Duponchel) *VD6 BD, larvae in fruits of Rosa.

Correction

Lita virgella (Thunberg) (longicornis (Curtis)). The record from Shapwick (Emmet, 1967:105) was based on a misidentification and should be cancelled.

References

- Bradley, J. D. & Fletcher, D. S, 1979. A recorder's log book or label list of British butterflies and moths, 136 pp. London.
- Emmet, A. M., 1967. Records of Lepidoptera in Somerset. Entomologist's Rec. J. Var. 79: 104-112.
 - -----, 1973. New records of Microlepidoptera for the county of Somerset. *Ibid.* 85:62-65.
 - -----, 1984. Coleophora prunifoliae Doets in Wiltshire. Ibid. 96: 83.
- Hall-Smith, D. H., 1983. A recorder's log book or label list of British butterflies and moths; Index, 59pp. Leicester.
- Hudd, A. E., 1906. Lepidoptera. Victoria history of the county of Somerset, 1: 87-115.
- Pelham-Clinton, E. C., 1949. New Somerset Lepidoptera records. Entomologist 82: 69.
- Turner, A. H., 1955. Lepidoptera of Somerset, 195pp., 1 map. Taunton.